

## Exploring and Proposing Appropriate Provisions Addressing the Mineral Resources Subjects and Governing Entities within the Framework of Gemological Law of Ukraine

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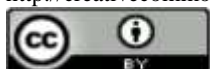
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### Abstract

Under this study, an interdisciplinary classification is developed concerning the entities of the gemological law. The classification is grounded in a symbiosis of criteria that define the content and scope of responsibilities, type of gemological activity undertaken, and the condition and appearance of a gemological object. The classification holds practical applications in mining, jewelry, business and management. Additionally, it can be employed in academic studies focusing on theoretic advancements in gemology, mineralogy, geology and jurisprudence. Introduction of this classification into the current legislation would enable both the entities of gemological law and law enforcement to integrally understand the spectrum, possibilities, forms and means of fulfilling their interests, along with their interrelations with other stakeholders. This research underscores that the primary criterion for developing an interdisciplinary classification of gemological law subjects is the type of gemological activity. Its symbiosis with other criteria, determining an entity's responsibilities, as well as the condition and appearance of objects, establishes a practically reasonable and scientifically substantiated approach to the perception and understanding of this branch of gemological law. To propose to classify the entities of gemological law, three criteria may be: 1) content and scope of duties; 2) type of gemological activity; and 3) condition and appearance of a gemological object. It is important to note that this classification cannot and should not have strict limits, as entities of gemological relations exhibit inter-group features that manifest in general, group-classified, and direct levels of connections between administrative, mining, and economic relations. The dynamics within these relations can reflect the development and change of one kind of relation to another, along with the accompanying relations.

### Keywords

Gemological law, entities, classification, gemological object, duties, gemological activity

## Introduction

Making national gemological law, encompassing a set of respective norms and institutions aimed at regulating diverse gemological relationships, such as those involving the extraction, production, use, and storage of gemstones, as well as the oversight of related operations, require a certain subject content. This element stands out as a significant feature of social relations governed by gemological law norms. Theoretical and practical considerations regarding the notion, classification, and analysis of various aspects related to the entities of the law hold importance. Mere existence of these entities creates the imperative for the initiation and execution of gemological relations. In the society, relationships without an object and subject are non-existent, as the entities are integral in: 1) participating in gemological relationships; 2) possessing entity's rights and legal duties; 3) exercising gemological rights through their actions; 4) creating and fulfilling gemological duties, while also bearing responsibility in case of non-compliance. Therefore, the issue of subject content of the gemological law, and thus the gemological legal relations, holds relevance for researchers in the field of gemology, mineralogy, geology and jurisprudence. It is equally pertinent for practitioners in mining and jewelry, state management, economic activity, and law enforcement.

## Review of Literature

Gemology researchers have predominantly concentrated their investigations on specific participants within gemological relations, leaving others indirectly examined in the context of particular gemological activities. In particular, various articles make reference to participants such as jewelers and gemologists, who have no training in gemology. This scope extends to professionals working in gemological laboratories, sellers and buyers of jewelry (Shigley, 2008), as well as gemologists and mineralogists (Fritsch and Rondeau, 2009). Additionally, attention is directed towards workers involved in the extraction and processing of colored stones (Archuleta, 2016), researchers specializing in colored gemstones, participants in field expeditions, and institutions like the Gemological Institute of America (GIA) (Vertriest, Palke and Renfro, 2019). Further exploration includes mining management (Hilson, 2020), the State Service of Geology and Mineral Resources of Ukraine (Kirin, Baranov and Khomenko, 2020), geologists at emerald mines (Manyepa and Mutambo, 2021), and workers extracting gemstones, alongside gemological companies (Sindelar, Barden and Stülp, 2021). According to the Ukrainian legislation, entities engaged in the extraction, production, use and storage of gemstones, as well as transactions involving them, are allowed to participate in economic activities in accordance with the law, irrespective of their property ownership form (Government of Ukraine, 1997<sup>1</sup>, hereinafter referred to as the Law on PM&GS).

Despite a quite substantial relevance of the raised question and the continuous usage of notions encompassed within the “entities of gemological law” category, existing articles have been only marginally and inadequately explored this subject.

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<sup>1</sup> Government of Ukraine (1997). *On State Regulation of Extraction, Production and Use of Precious Metals and Gemstones and Control of Operations with Them*. Available at: <https://zakon.rada.gov.ua/laws/show/637/97-%D0%B2%D1%80#Text> [Accessed 19 Dec. 2023]. Law of Ukraine № 637/97-BP, November 18, 1997 [in Ukrainian].

Simultaneously, it is crucial to acknowledge that the concept of “a subject of gemological law” necessitates a comprehensive analysis as a multifaceted phenomenon. While playing a pivotal role as an essential component of legal relations across various branches of the law, its specific characteristics may vary in each domain, particularly within gemological law and the intricate legal relationships emerging in gemology. Participation in the gemological legal relations requires any entity of gemological law to possess, at least three aspects: entitlement, legal capacity, and liability. For example, the State functions as an entity of the gemological law but engages in the gemological relations solely through its responsible bodies and officials. Furthermore, entities of the gemological law exhibit various facets of their existence, namely legal will, legal actions, legal consequences, legal consciousness, social-legal value, and more.

Currently, professionals from diverse fields have yet to undertake comprehensive research oriented towards defining the subject content of gemological law. It is essential to emphasize, however, that the present research examines the entities of gemological law within the context of their legal conduct as a precautionary measure. The objective of this study is the development of an interdisciplinary classification of entities within the gemological law. This classification is founded on a symbiosis integration of criteria that delineate the content and scope of their duties, nature of gemological activities they undertake, and the condition and appearance of the gemological objects involved.

## Methodology

Research methodology includes general scientific and special methods. In particular, the methods of deductive and inductive thinking, as well as the method of generalization, were used as the main methods of cognition used in legal practice. Deductive thinking in the work was used from more general to more specific, inductive - on the contrary, moving from specific observations to broader generalizations and theories. The method of analysis of existing legal acts and objective assessment of current gemological legislation was chosen as the basis for writing this article. At the initial stage, it made it possible to formulate research questions and tasks, find an industry source base, conduct its audit, screening and selection for inclusion in the research subject. Subsequently, an assessment of the conformity or non-conformity of the selected acts with the topic of the article was carried out, as along with the extraction of the necessary prescriptions, and their analysis and systematization.

The research objectives were the key components on the basis of which the entire process of review, assessment and analysis of the current gemological legislation was carried out. They emphasized the type of information needed, relevant literature, and directed and oriented their further analysis. Below are the main research questions that were formulated before starting work on the main material: a) how to take into account the interdisciplinary nature of the subjects of gemological law when developing their classification? b) what criteria are basic and auxiliary in their differentiation? c) what factors influence the formation of classification levels and limits? d) how should the state and prospects of gemological legislation be considered? e) are there special subjects in gemological law?

We have attempted to cover the entire existing gemological legal framework as well as most of the relevant published studies to make the literature review a sufficient knowledge base. Legal acts were downloaded from web sources, mainly from the Information and Search System "Legislation" — the official off-line system of the Verkhovna Rada of Ukraine, and were stored separately. They were then screened and included or excluded based on the above research questions.

## Results

The primary normative-legal document within gemological legislation, which establishes the fundamental principles and legal foundations for the State regulation of the extraction, production, use, and storage of gemstones, as well as the control of operations<sup>2</sup>, lacks a detailed breakdown of the general roster of entities in such relations. Additionally, it does not underscore their differentiation based on purposes. Instead, these entities are considered important elements around which legal relations in general and the gemological relations in particular revolve, serving as crucial components in both general legal connections and specifically within gemological contexts. Consequently, in accordance with the law, participants and law enforcement entities should perceive the spectrum, possibilities, forms and means of fulfillment their interests and their interrelation with other individuals. At the same time, the directives outlines in the Law on PMs&GSs, where the entities of gemological relations are exclusively are categorized as economic entities; fall short in fully elucidating their actual content. Furthermore, these instructions do not encompass entities explicitly mentioned in the text of the law.

Furthermore, when delineating the extensive domain of gemological law, it is imperative to scrutinize the intricate origins shaping its framework. Therefore, according to the categorization by the Ministry of Justice of Ukraine, the gemological legislation governing gemology and precious metals (PMs), under the title "Precious Metals and Gemstones" (code 110.120.050), fall within the ambit of normative-legal acts (hereinafter NLA), specifically categorized under "Currency Regulation" (code 110.120.000). This, in turn, is situated within the realm of financial-credit legislation (code 110.000.000 "Finances and Credit") as per the directive of the Ministry of Justice of Ukraine (hereinafter – Minjust).<sup>3</sup> Simultaneously, in the legislative structure proposed by the parliament's data-search system, "Legislation of Ukraine", the gemological constituent ("Precious Metals, Gemstones" – code 20130 30) is not confined solely to the section "Currency Legislation" (code 20130) within the budget-financial legislation (code 20). It also finds placement in the industrial legislation (code 160 "Legislation on Activities of Industrial Spheres), specifically within the section addressing "Inventory checking, disposition of precious metals, diamonds and gemstones for industrial purposes" (code 160 20). Despite this divergence, considering that the latter group of the NLA largely mirrors the primary (financial) one, a structural connection is acknowledged between the financial and gemological legislations. In the same way, the nexus between gemological legislation and economic legislation is

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<sup>2</sup> Ibid

<sup>3</sup> Government of Ukraine (2004b). *On approval of the Classifier of branches of the legislation of Ukraine*. Available at: [https://zakon.rada.gov.ua/laws/show/v43\\_5323-04?find=1&text](https://zakon.rada.gov.ua/laws/show/v43_5323-04?find=1&text) [Accessed 20 Dec. 2023]. Order of the Ministry of Justice of Ukraine № 43/5, June 2, 2004 [in Ukrainian].

evident, as the Law on PMs&GSs designates entities of the economy as the primary entities governed by its regulatory framework.

However, an analysis of provisions within this legislative act provides grounds for identifying additional participants in gemological relations. First of all, attention should be given to a category of state collective entities for which a gemstone serves predominantly as a virtual object, encompassing that organize, regulate and administer the gemological activities. Despite the fact that the Law on PMs&GSs includes instructions regarding the state management (Article 3) and state regulation (Section II), there is unfortunately no dedicated article enumerating the subjects within the aforementioned group. Therefore, Article 3 of the Law on PMs&GSs addressing state management in gemological sphere, outlining the governing functions of the bodies of executive power (BEP) in Ukraine. While the law doesn't elaborate on these functions, two distinct articles focus on the central BEP: one provides the formation of the state financial policy concerning the regulation of extraction, production, use and storage of gemstones (Article 16), and the other relates to the central BEP overseeing the state policy in the sphere of the State Assay Control (Articles 16-1). This is governed by Ministry of Finances of Ukraine (Minfin), in accordance with the Resolution of the Cabinet of Ministers of Ukraine (CMU).<sup>4</sup> The second functioned as the State Assay Control of Ukraine.

After liquidation of the latter in accordance with the government's Resolution № 442 dated 10.09.2014, and its functions under the ambit of State Assay Control (hereinafter – SAC) were allocated to the Minfin, while protection of rights of consumers of gemstone goods was entrusted to the State Service of Food Safety and Consumer Protection of Ukraine (hereinafter – SSUFSCP).<sup>5</sup> Nevertheless, the law makes no reference to the SSUFSCP. This legislative intricacy underscores not only the need for defining, organizing, and delineating the duties of state bodies power concerning gemological relations, but also the necessity for differentiation of competences between central and local branches of the representative power and the BEP. This requires presence of dedicated structural parts (chapters) within the Law on PMs&GSs that explicitly outline the duties of the Ukrainian Parliament, the Parliament of the Autonomous Republic of Crimea (hereinafter – ARC), and local government bodies (hereinafter – LG).

In the existing legal framework, for example, duties of the Cabinet of Ministers of Ukraine (CMU) in the gemological sphere are dispersed throughout the entire text of the law, touching upon the following types of relations:

- use and designation of valuables in the Historical Fund of the PMs&GSs of Ukraine.
- regulation of the formation and maintenance of the State Fund of PMs&GSs of Ukraine, along with its components – the Historical Fund, and determining the locations of these funds.

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<sup>4</sup> Government of Ukraine (2014). *On the approval of the Regulation on the Ministry of Finance of Ukraine*. Available at: <https://zakon.rada.gov.ua/laws/show/375-2014-%D0%BF#Text> [Accessed 20 Dec. 2023]. Resolution of the Cabinet of Ministers of Ukraine № 375, August 20, 2014 [in Ukrainian].

<sup>5</sup> Government of Ukraine (2015c). *On the approval of the Regulation on the State Service of Ukraine on Food Safety and Consumer Protection*. Available at: <https://zakon.rada.gov.ua/laws/show/667-2015-%D0%BF#Text> [Accessed 20 Dec. 2023]. Resolution of the Cabinet of Ministers of Ukraine № 667, September 2, 2015 [in Ukrainian].



- rules of trading GSs in raw and processed forms, as well as goods manufactured from them, owned by entities within the economic sector exercising property rights.
- sale of gemstones from the State Fund of PMs&GSs of Ukraine to economic entities.
- list of economic entities authorized to label domestically-produced goods with a state sample mark.

The Ministry of Finance (Minfin) serves as the central central body of executive power (BEP) overseen and coordinated by the Cabinet of Ministers of Ukraine (CMU). It holds a pivotal role as the principal entity within the central BEP system, responsible for shaping and executing the state policies related to the State Assay Control (SAC). Additionally, Minfin is instrumental in formulating and implementing state policies in the domains of extraction, production, use and storage of PM&GS, as well as their circulation and accounting.<sup>6</sup> Moreover, depending on the designated duties, the Minfin:

- performs normative-legal regulations within the gemological sphere;
- orchestrates the work related to the establishment of the State Fund of the PMs&GSs;
- Implements the state policies pertaining to the SAC, focusing on the quality of PMs&GSs, goods derived from them, and materials containing them;
- undertakes the state regulation and monitoring to combat the illegal acquisition and laundering of profits specifically targeting economy entities engaged in cash trade involving PMs&GSs and goods related goods. The organizational structure of the Minfin encompasses the Management of State Policy in the sphere of SAC, which, in turn, comprises two units. One of these units is responsible for state regulation in the production, utilization, and storage of PMs&GSs.

The entities falling within the purview of the Minfin's management sphere include the State Gemological Center of Ukraine (SGCU), the State Institution Museum of Precious and Decorative Stones (MPDS), the State Institution State Repository of Precious Metals and Gemstones (State Repository of PMs&GSs), and the State Enterprises of Assay Control (SEAC) having branches in Dnipropetrovsk, Donetsk, Western, Southern, Eastern and Central parts. Unlike the Minfin, these entities primarily engage with tangible gemstones and goods derived from them, collectively constituting a group of entities of use, expertise and utilization of GSs for scientific purposes, social-cultural needs, investment requirements, and more.

According to the legislation, the State Gemological Control Unit (SGCU) is mandated to – undertake various responsibilities, including the independent assessment and quality control of raw materials and products composed of gemstones (GSs), as well as items incorporating them. Additionally, the SGCU conducts expert evaluations of GSs classified in the State Fund of PMs&GSs of Ukraine. It offers methodological help to geology-surveying, mining and processing enterprises, aiming to enhance the quality of their work and methodological support. The unit is also involved in gemological studies of raw materials and undertakes other tasks assigned by relevant authorities in connection with the independent evaluation of GSs. Operating within the management sphere of the Minfin, the SGCU follows the guidelines established in the approved Order by the Government of Ukraine.<sup>7</sup>

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<sup>6</sup> Ibid

<sup>7</sup> Government of Ukraine (2004a). *On amendments to the Regulation on the State Gemological Center of Ukraine*. Available at: [http://www.gems.org.ua/alldoc/pol\\_2012.doc](http://www.gems.org.ua/alldoc/pol_2012.doc) [Accessed 20 Dec. 2023]. Order of the

The State Repository of PMs&GSs is a government institution created by the CMU for purchases of PMs&GSs in any form or condition, utilizing funds from the state budget. The repository is entrusted with the responsibilities of receiving, storing, selling and maintaining records of these assets, including those held within the State Fund of PMs&GSs of Ukraine.<sup>8</sup> The primary objective of the Museum of Precious and Decorative Stones (MPDS), as outlines in the Government of Ukraine's<sup>9</sup> directive is reliable preservation of its collection and the gathering of scientific mineralogical materials from both Ukrainian and international deposits. Additionally, the museum is dedicated to promoting scientific knowledge and popularizing gemological achievements. Since 2001, the museum has been recognized as a scientific entity with the status of National Heritage of Ukraine.

The second category within gemological law comprises entities under the state control within the domain of PMs&GSs. These entities operate in two primary facets: 1) state assay control of the quality of PMs&GSs and goods derived from them; 2) supervision of operations concerning PMs&GSs, involving tasks such as: 2.1) monitoring gemological business entities; 2.2) overseeing the compliance with the Kimberley Process Certification Scheme for rough diamonds, and 2.3) ensuring the quality control of measurements in laboratories of economic entities.

The law identifies two main entities involved in gemological control. The first category comprises institutions such as the Accounting Chamber of the National Bank of Ukraine (NBU), Minfin, and other BEPs as part of their specified duties outlined by the legislation of Ukraine. The second category includes entities under gemological control, namely: economic entities engaged in the extraction, processing and use of PMs&GSs, as well as those involved in purchasing, accepting jewelry and household items made of PMs&GSs as collateral in exchange for loans, trading these items, providing intermediary services in trade, storing and displaying various items containing these valuables, and handling the collection and recycling of waste and scraps of PMs&GSs. Additionally, this category encompasses military bases, units, organizations and institutions of the Ministry of Defence of Ukraine, the National Police of Ukraine (NPU), the Security Service of Ukraine, and organizations and institutions of other central BEPs.

The State Service for Consumer Rights Protection (SSUFSCP) serves as an entity responsible for conducting state monitoring and control to ensure compliance with consumer rights legislation, specifically concerning buyers of goods made of PMs&GSs. Additionally, the Minfin and the NBU are also entities engaged in purchasing and trading operations involving PMs&GSs and other valuables, both

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Ministry of Finance of Ukraine № 465, July 19, 2004 (as amended on July 16, 2012 № 837). [in Ukrainian].

<sup>8</sup> Government of Ukraine (1998b). *On the creation of the State repository of precious metals and Gemstones of Ukraine*. Available at: <https://zakon.rada.gov.ua/laws/show/321-98-%D0%BF#Text> [Accessed 21 Dec. 2023]. Resolution of the Cabinet of Ministers of Ukraine № 321, March 17, 1998. [in Ukrainian].

<sup>9</sup> Government of Ukraine (1996). *On the creation of a museum of precious and decorative stones*. Available at: <https://zakon.rada.gov.ua/laws/show/1485-96-%D0%BF#Text> [Accessed 21 Dec. 2023]. Resolution of the Cabinet of Ministers of Ukraine № 1485, December 11, 1996. [in Ukrainian].

domestically and internationally, without being constrained by quotas or licensing requirements. Furthermore, the NBU assumes the role of a storage entity for GSs.<sup>10</sup>

Another category of subject within gemological law comprises entities specializing in gemological expertise. As per the examination of the Law on PMs&GSs, such an expertise is conducted in instances involving the placement of valuables in the Historical Fund of PMs&GSs of Ukraine. Additionally, gemological expertise is carried out for the evaluation of inlays of gemstones and museum items containing gemstones. The State Gemological Control Unit (SGCU) is responsible for independent expertise and control of quality of raw material and GS goods, as well as goods containing them, including expert evaluation of GSs.

Furthermore, authorized representatives of the SGCU are actively involved in conducting essential expertise and processing accompanying documentation during customs clearance procedures for rough diamonds entering the customs territory of Ukraine and for diamonds being exported from the customs territory of Ukraine.<sup>11</sup> Various entities participate in these transactions, including the body responsible for import, the exporting body, the receiver (importer), and the sender (exporter). Furthermore, the SGCU assumes the responsibility for the registration of certificates and addressing other issues related to the implementation of the requirements outlined in the Kimberley Process Certification Scheme in Ukraine.<sup>12</sup> Additionally, training to become a gemology expert and also work related to the expertise of GSs is paid for according to the tariffs approved by Order № 593 of the Minfin as of 24.06.2015 (version № 725 as of 30.12.2021).

The assessment of estimated and insurance values for museum items of the Ministry of Culture and Information Policy of Ukraine (MCIP) is carried out through the purchasing-fund commissions of the museums, involving experts and specialists. Specifically, for items containing GSs, experts from the State Expertise and Appraisal Center (SEAC) and SGCU authorized for such tasks in accordance with government regulations perform the necessary assessments.<sup>13</sup> Additionally, the expertise of GS inlays and museum items containing GSs can be carried out by the SEAC, as well as legal and physical entities functioning as economic entities (Government of Ukraine, 1999b<sup>14</sup>). According to the order of the Ministry of Culture of Ukraine, entities

<sup>10</sup> Government of Ukraine (1999a). *About the National Bank of Ukraine*. Available at: <https://zakon.rada.gov.ua/laws/show/679-14#Text> [Accessed 21 Dec. 2023]. Law of Ukraine № 679-XIV, May 20, 1999. [in Ukrainian].

<sup>11</sup> Government of Ukraine (2003a). *On importing diamonds into the customs territory of Ukraine and exporting them from the customs territory of Ukraine*. Available at: <https://zakon.rada.gov.ua/laws/show/307-2003-%D0%BF#Text> [Accessed 21 Dec. 2023]. Resolution of the Cabinet of Ministers of Ukraine № 307, March 12, 2003. [in Ukrainian].

<sup>12</sup> Government of Ukraine (2003b). *On the approval of the Procedure for issuing accompanying documents and introducing diamonds into circulation in accordance with the certification scheme of the Kimberley process*. Order of the Ministry of Finance of Ukraine, № 276, April 9, 2003. [in Ukrainian].

<sup>13</sup> Government of Ukraine (1998a). *On the approval of the Instruction on the procedure for determining the estimated and insurance value of monuments of the Museum Fund of Ukraine*. Available at: <https://zakon.rada.gov.ua/laws/show/z0496-98#Text> [Accessed 21 Dec. 2023]. Order of the Ministry of Culture and Arts of Ukraine № 325, July 13, 1998. [in Ukrainian].

<sup>14</sup> Government of Ukraine (1999b). *On the approval of the Instructions on the procedure for stamping jewelry and household products made of precious metals, on conducting tests and examinations of precious metals, products made from them, gemstones inserts, museum objects containing precious metals*



utilizing the findings of gemological expertise include the participants in the state expertise of cultural valuables. This encompasses applicants, organizers of expertise, experts, and experts and art historians.<sup>15</sup>

Finally, the category of entities involved in gemological expertise and forensic activities, defined by corresponding legislation, encompasses forensic experts from the Scientific Research Institute of Forensic Expertise (SRIFE), the Minjust, and the State Scientific Research Forensic Center (SSRFC) of the Ministry of Internal Affairs of Ukraine (MIA). These entities, identified in the corresponding legislation, undertake gemological expertise, expert studies and evaluation of GSs (Kirin *et al.*, 2023).

Entities engaged in the certification of GSs can include economic entities conducting operations with GSs or incorporating them into their activities. Persons involved in the certification must possess the relevant qualifications. The certification process of GSs is carried out at various critical stages, including the final phases of mining (for GSs sourced from Ukrainian deposits), processing and the production of goods from these mineral reserves. If certification by the aforementioned entities is not feasible, an agreement can be reached for certification through the SGCU as stipulated.<sup>16</sup>

Economic entities undergoing privatization (corporatization) and the body of privatization (specifically, the State Property Fund of Ukraine or SPFU) are identified as the entities responsible for evaluating PMs&GSs within state and municipal properties. These evaluations are essential for the inclusion of PMs&GSs in the authorized funds of economic entities, as well as in property of lessees when introduced into the authorized fund of a joint-stock company managing a leased enterprise.<sup>17</sup> The methodological recommendations of the Minfin determine the entities responsible for accounting for PMs&GSs, including the sender (providing scraps and wastes to other entities) and the receiver (receiving scraps and wastes from other entities for further primary processing or recycling).<sup>18</sup>

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*and gemstones, impressions of state assay marks.* Available at: <https://zakon.rada.gov.ua/laws/show/z0874-99#Text> [Accessed 21 Dec. 2023]. Order of the Ministry of Finance of Ukraine № 244, October 20, 1999 (as amended by the order of the Ministry of Finance of Ukraine, 2020, September 7, № 547) [in Ukrainian].

<sup>15</sup> Government of Ukraine (2019c). *On the approval of Methodological recommendations for the state examination of cultural values.* Available at: <https://zakon.rada.gov.ua/rada/show/v0877734-19#Text> [Accessed 21 Dec. 2023]. Order of the Ministry of Culture of Ukraine № 877, November 15, 2019 [in Ukrainian].

<sup>16</sup> Government of Ukraine (2000). *On the approval of the Rules for the attestation of Gemstones, Gemstones of organic formation, semi-Gemstones.* Available at: <https://zakon.rada.gov.ua/laws/show/1396-2000-%D0%BF#Text> [Accessed 21 Dec. 2023]. Resolution of the Cabinet of Ministers of Ukraine № 1396, September 6, 2000 [in Ukrainian].

<sup>17</sup> Government of Ukraine (2001a). *On the approval of the Procedure for Valuation of Precious Metals, Gemstones, Gemstones of organic formation, Semi-Gemstones and Decorative Stones during Privatization (Corporatization).* Available at: <https://zakon.rada.gov.ua/laws/show/z0494-01#Text> [Accessed 21 Dec. 2023]. Order of the Ministry of Finance of Ukraine and the State Property Fund of Ukraine № 242/855, May 21, 2001 [in Ukrainian].

<sup>18</sup> Government of Ukraine (2015b). *On the approval of Methodological recommendations for the accounting of precious metals and Gemstones, Gemstones of organic formation, Semi-Gemstones, products made from them and materials containing them.* Available at: <https://zakon.rada.gov.ua/rada/show/v0780201-15#Text> [Accessed 21 Dec. 2023]. Order of the Ministry of Finance of Ukraine № 780, September 15, 2015 [in Ukrainian].

The latter groups of entities highlight that the primary criterion for developing an interdisciplinary classification of entities within gemological law is the type of gemological activity. This criterion, when combined with other factors determining the duties of entities, as well as the condition and appearance of gemological objects, suggests the most practically justified and scientifically substantiated approach to understanding and interpreting this facet of the gemological law. A specific bylaws of the the National Legislation Acts (NLA) that distinctly identifies various types of gemological activity is the resolution issued by the Minfin. This resolution outlines the procedures for accounting, creating and implementing a register of economic entities engaged in operations with PMs&GSs. These activities encompass the production of PMs&GSs, crafting jewelry and household goods using PMs&GSs, repairing jewelry and household items with PMs&GSs, making household goods using PMs&GSs, (including instruments and technical goods with natural diamonds), trading (wholesale, retail, commission) of PMs&GSs and goods containing PMs&GSs, exchanging jewelry and household goods with PMs&GSs for PM scraps, ; utilizing PMs&GSs for production, scientific, socio-cultural needs and investment purposes, pawnshop operations involving PMs&GSs, purchasing PMs&GSs, faceting and other processing of GSs, including diamond faceting, collection and primary processing of PMs&GSs wastes and scraps, and ongoing exposition of PMs&GSs.<sup>19</sup>

The given list is more extensive than the legislative enumeration found in Article 1 of the Law on PMs&GSs, yet it does not fully align with the directives of the law. Firstly, within the law, the term “operations with PMs&GSs” specifically denotes gemological activities. Secondly, these actions encompass various aspects, including: a) emergence and suspension of the property rights and other rights to GSs, such as acceptance jewelry and household goods with PMs as collateral for loans; b) the entry of GSs into designated storage locations, their maintenance, and their disposal in a predetermined manner; c) alteration in the content or physical condition of GSs as they undergo extraction, production and usage; c) the import and export of GSs, goods and materials containing them to and from Ukraine ; and d) the maintenance and exhibition of GSs.

Therefore, recognizing that certain entities engage in conducting operations with gemological objects – GSs with specific content, appearance and/or conditions - there is a rationale to designate a set of entities within gemological law based on the criterion of a gemological object. These categories include:

- 1) entities involved with natural minerals in their raw form;
- 2) entities dealing with natural materials in unprocessed state;
- 3) entities dealing with natural minerals in processed forms (goods);
- 4) entities dealing with artificial (synthetic) minerals in raw materials;
- 5) entities dealing with artificial (synthetic) minerals in raw form;
- 6) entities managing artificial (synthetic) minerals in processed form (goods).

Moreover, it is essential to distinguish entities involved in the production of gemological goods, dividing them into:

– entities manufacturing GS goods (using one or a combination of several types);

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<sup>19</sup> Government of Ukraine (2013). *On approval of the Procedure for accounting, creating and maintaining a register of business entities that carry out transactions with precious metals and Gemstones*. Available at: <https://zakon.rada.gov.ua/laws/show/z1087-13#Text> [Accessed 21 Dec. 2023]. Order of the Ministry of Finance of Ukraine № 465, April 8, 2013 [in Ukrainian].

– entities producing goods containing GSs (for example, GS inlays). It is noteworthy that the analysis of gemological objects themselves was previously conducted by the authors in a previous study (Kirin, Baranov and Koziakov, 2022).

Such an approach facilitates a more comprehensive examination of entities utilizing and applying GSs for individual purposes. To achieve this, it is essential to consider the position outlined in the Economic Code of Ukraine (ECU). As per Article 2 of the ECU, participants in the economic sphere encompass: 1) entities of economy; 2) consumers; 3) bodies of state power and the local governments vested with economic authorities; 4) citizens, non-governmental organizations acting as founders of economic entities or fulfilling organizational-economic duties based on the property ownership rights. However, not all individuals falling under these categories are considered entities of economic legal relations; they are participants in economic gemological relations requiring a specific set of attributes. In the sphere of economy who have a complex of necessary features. Consequently, entities recognized as participants in economic gemological relations are those that: a) directly engage in economic activities or manage such an activities; b) have been established in accordance with the law; c) possess the necessary property to perform economic activities; d) have economic legal personality.

Coinciding the nature of activity, it is justified to designate the entities into the following groups:

- 1) entities of the economy directly directly involved in gemological activity, termed as subjects of economic-production relations;
- 2) entities with organization-economic duties responsible for organizing and managing gemological activity, identified as subjects of organization-economic relations.

In this context, as defined in the ECU, economic-production gemological relations encompass property and other relations that arise among subjects of the economy during the direct execution of economic gemological activities. On the other hand, organization-economic gemological relations are those that evolve between subjects of the gemological economy and entities with organization-economic duties during the management of gemological economic activities. Building upon the preamble of the Law on PMs&GSs, there is justification for further differentiation in the subject circle of gemological relations. This includes:

- 1) subjects of mining – entities involved in extraction of GSs from rocks using all available means.
- 2) subjects of use – entities that recycle, process, use, and apply GSs for production, scientific, socio-cultural and investment purposes.
- 3) subjects of circulation – entities conducting operations with PMs&GSs.

The category of subjects of circulation unmistakably encompasses those involved in maintenance, as well as partially includes subjects of use and subjects of production. Though the concept of “production of GSs” lacks explicit definition in the Law on PMs&GSs, it becomes imperative to conduct a more detailed study due to inherent ambiguity. This ambiguity is evident in Article 189-1 of the Code of Ukraine on Administrative Violations, titled “Violations of order of extraction, production, use and selling of precious metals and gemstones, gemstones of organogenic formation and

semiprecious stones”. Therefore, a more detailed exploration is warranted to enhance clarity and understanding of the term within the legal framework.

The entity responsible for coordinating the extraction of GSs and entity responsible for coordinating the state reserve for mined deposits of PMs&GSs at a broad level is the State Geological and Subsoil Survey of Ukraine (UGS).<sup>20</sup> Among the group-classified subjects overseeing the organization of GS extraction, structural units within the UGS play a crucial role. Notably, these include the Department of the State Geological Control and interregional units (Central, Eastern, Western, Southern, Azov-Black Sea, Northern), as well as the Unit overseeing mineral resources utilization and management of procedures for granting special approvals. Officials at the general and group-classified levels constitute the direct operational tier within the entities responsible for organizing the extraction of GSs.

As an example of an entity engaged in production activities through the extraction of GSs, one can highlight the State Enterprise Amber of Ukraine. Its primary operational focus aligns with the classification of DK 009:2010<sup>21</sup>, specifically falling under Section B:

- Extracting industry and mining of quarries;
- Within this classification, it corresponds to Section 8;
- Extraction of other fossils and mining of quarries;
- Group 08.9 - Extraction of fossils and mining of quarries;
- Class 08.99 - Extraction of other mineral resources and mining of quarries (not included in other groupings).

Among other things, these classes comprises various mining activities, whether underground or open, involving diverse minerals and materials such as GSs, quartz, mica, etc. In addition to its extraction pursuits, the enterprise is also certified for activities like 32.12 - Production of jewelry and similar goods, and 09.90 - Provision of additional services in the sphere of extraction of other mineral resources and quarrying, demonstrating a diversified operational portfolio.

Applying the same the same underlying principle, it is suggested to categorize the entities involved in the recycling and processing of GSs, including primary processing tasks such as sorting, division, pyrotechnical and radiation controls. Additionally, entities engaged in the recuperation of GSs, involving the return of a portion for reuse, should be designated accordingly. The composition of participants is distinctive, comprising both primary and ancillary entities governed by gemological law dealing with GSs as commodities. Such participants extend to individuals taking part in organizing retail and auction trade of antique items. This includes entities of the economy overseeing the commission and sale of antique items through specialized consignment stores, dedicated sections of consignment stores, and specific

<sup>20</sup> Government of Ukraine (2015a). *On Approval of the Regulations on the State Service of Geology and Subsoil of Ukraine*. Available at: <https://zakon.rada.gov.ua/laws/show/1174-2015-%D0%BF#Text> [Accessed 21 Dec. 2023]. Resolution of the Cabinet of Ministers of Ukraine № 1174, December 30, 2015 [in Ukrainian].

<sup>21</sup> Government of Ukraine (2010). *Classification of types of economic activity DK 009:2010*. Available at: <https://zakon.rada.gov.ua/rada/show/vb457609-10#Text> [Accessed 21 Dec. 2023]. Order of the State Committee of Ukraine on Technical Regulation and Consumer Policy, № 457, October 11, 2010 [in Ukrainian].

consignment sections within stores offering a broad range of non-grocery goods. Moreover, participants involve workers of economy entities serving the buyers, auction organizers, auction commissions (comprising roles such as head, accountant, commodity expert, cashier, lawyer, archivist, art historians, and other specialists categorized under signed labour agreements (contracts). Entities such as the owners of antique items, facilitators, and auction host are integral parts of this intricate network.<sup>22</sup> The trade of GSs, trade of GSs, both in raw and processed forms, and goods associated with them, by entities holding property rights, is regulated by the Rules outlines in the resolution of the CMU dated 04.06.1998 № 802 (as of 25.01.2017, № 41). It is noteworthy that this activity can also be carried out through distance communication means, as specified by the same Rules. Furthermore, these Rules govern the relationship between consumers and sellers concerning the specified types of GSs.

The geology-centric subjects, museum affairs within the Ministry of Defence of Ukraine (hereinafter – Mindefence) can be classified as:

- military museum;
- military-museum networks;
- museum formation;
- a branch of military museums.

These museums are entitled to to form national, regional and specialized organizations (unions, associations, etc.), and may also join international museum organizations and funds.<sup>23</sup>

Recipients of national awards in Ukraine, whether citizens, foreigners, or stateless persons, with awards made of PMs and/or GSs, are permitted to transport those awards abroad if they possess the necessary documentation outlined in the Order issued by the CMU on 21.06.2001 № 677. The export of GSs and goods made containing them outside the customs territory of Ukraine, for the purpose of disposition, is carried out through actions, verbant agreement, and the owner's explicit will or written declaration, as required by a customs service official, following the regulations established in the CMU-approved Order of 21.05.2012, № 448. Finally, the entities responsible for protecting PMs&GSs during their extraction, production, processing, trade and export, as well as goods derived from them, in the specified order, are:

- bodies of the National Police of Ukraine (NPU);
- organizations holding licenses for such activities as mandated by the legislation;
- employees of relevant enterprises.

## Discussion

When delineating the circle of subjects involved in the social-legal administering of the circulation of PMs&GSs, Titova (2021) introduced a classification based on the scope of their competencies. These are categorized as follows: 1) entities with general

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<sup>22</sup> Government of Ukraine (2001b). *On the approval of the Rules of trade in antiques*. Order of the Ministry of Economy and European Integration of Ukraine and the Ministry of Culture and Arts of Ukraine № 322/795, December 29, 2001. (accessed July 28, 2023) [in Ukrainian].

<sup>23</sup> Government of Ukraine (2019d). *On the approval of the Instructions for the organization of military museums, museums (rooms) of military traditions in the Armed Forces of Ukraine*. Order of the Ministry of Defense of Ukraine № 374, July 10, 2019 [in Ukrainian].



competence, including the Ukrainian Parliament, the President of Ukraine, CMU, local BEPs and local governments (LGs); 2) bodies engaged in interdisciplinary public administration, such as the Ministry of Economy of Ukraine (Mineconomy), the Ministry of Internal Affairs (MIA), Ministry of Environment and Natural Resources of Ukraine (Minenvironmental), State Customs Service of Ukraine and other; 3) subjects of interdisciplinary public administration (special public administration), including entities like Minfin, State Fiscal Service of Ukraine, The State Service for Consumer Rights Protection (SSUFSCP), State Geological and Subsoil Survey of Ukraine (UGS), and the State Service of Ukraine for Geodesy, Cartography and Cadastre (StateGeoCadastre); 4) legal entities of public law, represented by, such as, State Gemological Control Unit (SGCU), State Repository of PM&GS, MPDS, and the Enterprises of State Assay Control (SAC) (Titova, 2021).

However, this depiction of the system of subjects of public-legal administration within the sphere of PMs&GSs domain has elicited various comments and objections. First of all, in the given list, the State Fiscal Service of Ukraine had undergone reorganization resulting in the establishment of the State Tax Service of Ukraine (STS) and the State Customs Service (SCS) as per order № 1200 of the CMU dated 18.12.2018. Secondly, both the entities are central BEPs, whose activities are oriented and coordinated by the CMU through the Minfin. Therefore, the SCS cannot be categorized as a subject of interdisciplinary public administration, and the State Tax Service should not be considered a subject of sphere-related public administration since both fall under the jurisdiction of Minfin. Thirdly, for the mentioned legal entities of public law, in general, no specific sphere of duties was outlined, leading to a lack of a defined position in the classification. Taking into account that all of them are state institutions within the purview of Minfin management, their competence should align with that of central BEPs. Thus, they should be recognized as subjects of interdisciplinary public administration. Fourthly, it should be considered that the classification was incorrect if the UGS and StateGeoCadastre are grouped into entities of sphere-related public administration. These central BEPs are responsible for implementing state policies in the areas of mineral reserves and land relations concerning all kinds of mineral resources. Hence, they should be categorized as having an interdisciplinary status within the public-legal administration framework of the PMs&GSs circulation sphere.

The structurally integrated entities within gemological law exhibit a more ramified classification. As previously mentioned, this complexity arises from the fact that the Minfin covers a gemological management, which, in turn, houses a gemological unit. Moreover, Article 20 of the Law on PMs&GSs designates officials of the regulatory bodies as the entities responsible for state control over operations involving PMs&GSs. Therefore, it is advocated that for a more justified division, wherein subjects from each group are further classified into respective subgroups. These subgroups would unite the general entities (such as Minfin), category-related entities (including management, unit), and direct entities (comprising officials). It is crucial to note that such a classification lacks distinct boundaries, given that subjects involved in gemological legal relations exhibit inter-group features that manifest specifically at respective levels of connections within administrative, mining and economic realms.

Concerning the array of entities engaged in specific types of gemological activities, it is essential to highlight the provisions outlined in Part 3 of Article 15 of the Law on

PMs&GSs. This section specifies that entities responsible for certifying laboratories associated with economic entities involved in the production of jewelry and household goods may include both the Ministry of Economics of Ukraine and Minfin. However, it is pertinent to note that as of 01.01.2016, the Law of Ukraine “On Metrology and Metrological Activity,” took full effect, leading to the liquidation of the national System of Certification of Laboratories. Simultaneously, a framework for voluntary accreditation of calibration and testing laboratories, bodies conducting conformity assessments as specified by this particular law and other Ukrainian statutes, was introduced. Therefore, entities tasked to conforming or recognizing the competence of laboratories, in accordance with the State Standards, encompass laboratory clients, regulatory bodies, organizations and project developers utilizing expert conclusions, and bodies of accreditation bodies.<sup>24</sup>

It is crucial to highlight a distinctive category of GS in Ukraine that holds a unique legal status. The legal framework governing gemstones, such as amber, spans various legislative spheres, each addressing specific aspects related to its extraction and utilization. In particular: 1) the administrative legislation identifies responsibilities for violations related to the extraction; 2) the laws on the natural resources and mining eliminate the necessity of obtaining an act for provisions with mining allotment to a user of amber-bearing reserve with special permission for using such natural reserves; 3) the criminal legislation establishes penalties for illegal extraction, sale, purchase, disposition, dispatch, transfer, and processing of amber; 4) the land legislation specifies obligations for users involved in amber-bearing natural resources performing surveys and/or mining, including the primary right to land use for those having special permission; 5) the customs legislation outlining new tariffs for unprocessed and processed forms of amber, agglomerated amber (ambroide), and items manufactured from them.<sup>25</sup> Furthermore, the tax legislation identifies the rent size applicable to amber mining from natural resources. Consequently, a distinct subject has emerged in gemological legislation, namely user of amber-bearing resources.

Table 1: Classification of entities of gemological law (classification criteria)

<i>Classification groups of subjects</i>	<i>Group representative</i>	<i>Functional area</i>
1. Content and scope of powers		
1.1) entities of general powers	Verkhovna Rada of Ukraine, President of Ukraine, CMU, local BEP and LG	General regulation of gemological relations
1.2) entities of inter-sectoral powers	Mineconomy, MIA, Minenvironmental,	Inter-sectoral management in the field of gemological relations

<sup>24</sup> Government of Ukraine (2019a). DSTU EN ISO/IEC 17025:2019 General requirements for the competence of testing and calibration laboratories (EN ISO/IEC 17025:2017, IDT; ISO/IEC 17025:2017, IDT). (n.d.). Available at: [http://online.budstandart.com/ua/catalog/doc-page.html?id\\_doc=88724](http://online.budstandart.com/ua/catalog/doc-page.html?id_doc=88724) [Accessed 21 Dec. 2023] [in Ukrainian].

<sup>25</sup> Government of Ukraine (2019b). *On Amendments to Certain Legislative Acts of Ukraine on Improving the Legislation on the Mining of Amber and Other Minerals*. Available at: <https://zakon.rada.gov.ua/laws/show/402-20#Text> [Accessed 21 Dec. 2023]. Law of Ukraine № 402-IX, December 19, 2019 [in Ukrainian].

<i>Classification groups of subjects</i>	<i>Group representative</i>	<i>Functional area</i>
	UGS, StateGeoCadastre, SSUFSCP	
1.3) entities of sectoral powers	Minfin, STS, SCS	Sectoral management in the field of gemological relations
1.4) entities of intra-sectoral powers	SGCU, State Repository of PM&GS, MPDS, Enterprises of SAC	Intra-industry transactions with GS
1.5) entities of related to gemological powers	Minjust, Mindefence, MCIP, SPFU	Management in the field of related to gemological relations
<b>2. Nature of the gemological activities carried out</b>		
2.1) entities that organise and manage gemological activities (regulation, control over operations)	Minfin	Formation of the state GS-policy, implementation of the state SAC policy
	SSUFSCP	Implementation of state supervision (control) over compliance with the legislation on consumer protection of PM&GS products
	Accounting Chamber, NBU, Minfin and other BEP	Control over PM&GS operations, activities of gemological business entities
	SGCU	State control over diamond transactions in accordance with the requirements of the Kimberley Process Certification Scheme; quality control of measurements in laboratories of business entities. Independent gemological examination and quality control of raw materials and products made of GS, as well as products with them, expert assessment of GS
	State repository of PM&GS, MPDS, Enterprise of SAC	Use and application of GS for scientific, social, cultural and investment needs
2.2) entities directly engaged in activities aimed at manufacturing and selling gemological products, performing gemological works or providing gemological services (mining, production,	Minfin, NBU	Purchase and sale of PM&GS, other jewellery on the domestic and foreign markets, storage of GS
	SEAC, Business entities	Expertise of GS inserts, museum objects containing GS
	Applicants, Organizers of expertise, Experts and Art Critics	State expertise of cultural property
	SRIFE of Minjust, SSRFC of MIA	Forensic gemological expertise

<i>Classification groups of subjects</i>	<i>Group representative</i>	<i>Functional area</i>
use, storage, etc.);	SGCU, Business entities	GS certification
	SPFU, Business entities	PM&GS assessment
	Business entities, sender and receiver	PM&GS accounting
	Fund and purchase Commissions of Museums	Determining the appraisal and insurance value of museum objects
	NPU, Business entities	PM&GS security
	Business entities	Operations with GS: production, manufacturing and repair of jewelry and household goods, manufacturing of industrial goods, including the manufacture of tools and other technical products from natural diamonds, trade (wholesale, retail, commission) in GS and GS products, exchange of finished jewelry and household items for PM scrap, use of GS for production, scientific, social and cultural needs and investment purposes, pawnshop operations, purchasing, cutting and other processing of GS, including diamond cutting, collection, primary processing of waste and scrap, and storage, importing GS, products and materials containing them into Ukraine from abroad and exporting them from Ukraine, exhibiting GS on a permanent basis.
3. Condition and appearance of a gemological object		
3.1) entities handling natural minerals in raw materials	UGS, Business entities	Mining organization, GS mining
3.2) entities handling natural minerals in their unprocessed form	Business entities	Sorting, separation, pyrotechnic and radiation control GS
3.3) entities handling natural minerals in processed form (products)	Business entities, Consumers	Processing, treatment, recovery of GS, other operations with GS, products made of GS and products containing GS, organization of trade in antiques in the retail network and at auctions
	Museums	GS exposure
	Citizens of Ukraine,	Removal of state awards from PM

<i>Classification groups of subjects</i>	<i>Group representative</i>	<i>Functional area</i>
	Foreigners and Stateless Persons	and/or GS
3.4) entities handling artificial (synthetic) minerals in raw material	Business entities	Production of artificial (synthetic) minerals in raw materials
3.5) entities handling artificial (synthetic) minerals in their raw form	Business entities	Sorting, separation, pyrotechnic and radiation control of artificial (synthetic) minerals in raw form
3.6) entities handling artificial (synthetic) minerals in processed form (products)	Business entities	Manufacture of industrial products, including tools and other technical products
3.7) Amber handling entities	Business entities	Mining, sale, acquisition, transfer, forwarding, transportation, processing of amber

## Conclusion

The conclusion is in 6 highlighted points, which are as follows:

1. In this article, an interdisciplinary classification of entities of gemological law is developed, grounded in the fusion of criteria determining the content and scope of their duties, the nature of conducted gemological activities, and the condition and appearance of the gemological objects under consideration. This classification holds practical utility in diverse domains such as mining jewelry production, business, and administration. Additionally, it serves as a valuable tool in academic pursuits aimed at advancing theoretical frameworks in gemology, mineralogy, geology, and jurisprudence. Implementing this classification into the current legislation would facilitate a comprehensive understanding for both entities within gemological law and law enforcement stakeholders, enabling a holistic grasp of the circle, opportunities, forms and methods involved in safeguarding the interests of participants in relevant relationships. Moreover, it would enhance comprehension of the intricate interrelations among individuals involved in gemological law.

2. Evidences are presented supporting the assertion that the criterion of the type of gemological activity performed is fundamental to the development of an interdisciplinary classification for entities within the gemological law. Its integration with other criteria determining the responsibilities of entities, as well as the condition and appearance of gemological objects, establishes the most practically justified and scientifically substantiated approach to comprehending and interpreting this facet of gemological law. The production activities of economic entities in the field of gemology encompass efforts directed at creating and selling gemological products, executing gemological work, or providing gemological appraisal services, all assessed in terms of their monetary value. According to the directives of economic legislation, the production of gemological relations is construed as property relations and other



connections arising among entities during the direct execution of economic gemological (productive) activities. The organizational gemological relationships, on the other hand, pertain to connections emerging between entities in the gemological economy and those with organization-gemological duties in the management of productive gemological activities.

3. A classification systems for subjects within gemological law is proposed based on the following criteria:

1) Content and scope of duties:

- 1.1) subjects of general duties;
- 1.2) subjects of interdisciplinary duties;
- 1.3) subjects of sphere-related duties;
- 1.4) subjects of within-a-sphere duties; and
- 1.5) subjects of gemology-centric duties.

2) Pattern of performed gemological activity:

- 2.1) subjects involved in the organization and management of gemological activities (regulation, control of operations); and
- 2.2) subjects directly engaged in activities related to the production and sale of gemological products, the execution of gemological work, or the provision of gemological services (extraction, production, use, storage, etc.).

3) Condition and appearance of a gemological object:

- 3.1) subjects dealing with natural minerals in raw material;
- 3.2) subjects dealing with natural minerals in an unprocessed form;
- 3.3) subjects dealing with natural minerals in a processed form (goods);
- 3.4) subjects dealing with artificial (synthetic) minerals in raw material;
- 3.5) subjects dealing with artificial (synthetic) minerals in an unprocessed form;
- 3.6) subjects dealing with artificial (synthetic) minerals in a processed form (goods); and
- 3.7) subjects dealing with amber (refer to Table 1).

4. The classification presented by Government of Ukraine lacks distinct boundaries due to the inter-group features inherent in subjects of gemological legal relations. These characteristics become particularly evident at broader, group-related levels of connections within administrative, mining and economic relations. The dynamics of these relations can signify the evolution and transformation of one type of relations into another, along with the accompanying relationships that emerge. Such an interdisciplinary legal nature is a common trait not only in gemological law but also in other legal domains that regulate complex objects, marked by a network of relations involving diverse material resources

- whether natural, recycled, and/or processed
- across various stages of economic development

5. Viewing the gemological legislation as a complex institution with budgetary and financial, industrial, economic legislation, and legislation related to mineral resources has been suggested. Its current reform should encompass, among other aspects, the

refinement of specific structural components (chapters) within the gemological law. These chapters would distinctly unpack the duties of key entities such as the Ukrainian Parliament, the Parliament of the Autonomous Republic of Crimea, local government bodies, and executive authorities responsible for regulating gemological relations.

6. Arguments are put forth supporting the recognition of distinct entities in the gemological law, particularly the user of amber-bearing resources. The legal status of this entity is enshrined in a complex set of regulations inculcating gemological, administrative, criminal, customs, tax, budget, mining, land, and resource legislation. No other type of gemological object in Ukraine is subject to such an extensive legislative framework. It is recommended to establish a systemic structure for the subject scope of the user of amber-bearing resources within the Law of Ukraine on Amber.

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## Authors' Declarations and Essential Ethical Compliances

### *Authors' Contributions (in accordance with ICMJE criteria for authorship)*

<i>Contribution</i>	<i>Author 1</i>	<i>Author 2</i>	<i>Author 3</i>	<i>Author 4</i>
Conceived and designed the research or analysis	Yes	Yes	Yes	Yes
Collected the data	Yes	Yes	Yes	Yes
Contributed to data analysis & interpretation	Yes	Yes	Yes	Yes
Wrote the article/paper	Yes	Yes	Yes	Yes
Critical revision of the article/paper	Yes	Yes	Yes	Yes
Editing of the article/paper	Yes	Yes	Yes	Yes
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Project Administration	Yes	No	No	No
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Overall Contribution Proportion (%)	35	25	25	15

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### *Research involving human bodies or organs or tissues (Helsinki Declaration)*

The author(s) solemnly declare(s) that this research has not involved any human subject (body or organs) for experimentation. It was not a clinical research. The contexts of human population/participation were only indirectly covered through literature review. Therefore, an Ethical Clearance (from a Committee or Authority) or ethical obligation of Helsinki Declaration does not apply in cases of this study or written work.

### *Research involving animals (ARRIVE Checklist)*

The author(s) solemnly declare(s) that this research has not involved any animal subject (body or organs) for experimentation. The research was not based on laboratory experiment involving any kind animal. The contexts of animals were only indirectly covered through literature review. Therefore, an Ethical Clearance (from a Committee or Authority) or ethical obligation of ARRIVE does not apply in cases of this study or written work.

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